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# Operational Fleet Networks FSET Observations and Insight

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- My Background
  - 10 Years experience with SPAWAR
    - OTH-T Interoperability Testing
      - Lab Testing of JMCIS (pre GGCS-M)
      - Provided exercise support
      - BGSIT support
    - FSET Program
      - Since 1999

- As a Fleet System Engineer we are responsible to the CSG N6 to ensure maximum availability of Strike Group C4I.

- This includes but not limited to:
  - APPLICATIONS AND SERVICES such as GCCS-M, COMPOSE, GBS, JSIPS-N, BFEM etc.
  - NETWORKS ISNS (GENSER, UNCLAS, JCA, SCI, CENTRIXS (multiple enclaves), ADNS, TBMCS, APS, NAVMACS.
  - RF - WSC-8, WSC-6, GBS, UHF, TV-DTS
  - TRANSPORT - ADMS, Base-band (Crypto, signaling, etc.)

## *MAXIMUM AVAILABILITY*

For the Entire Strike Group

- Airwing
- Escorts
- Other (non-attached) units in Arabian Gulf

- Major efforts
  - Work-ups
    - Embarkation
    - Integration
    - Stabilization
    - Training
  - Deployment
    - Availability
    - Training
    - Coordination

# Operational Fleet Networks



- Observations
  - Reliability of newer systems has improved dramatically.
    - COTS
    - GOTS
  - Bandwidth is still difficult to manage
    - Competing priorities
    - Backlogs
  - Training has improved
    - Based on Sailor's Knowledge, Navy schoolhouses are more integrated with current technology.
  - Sailors are knowledgeable today more than ever
    - IA Staffs on CVNs are viable.





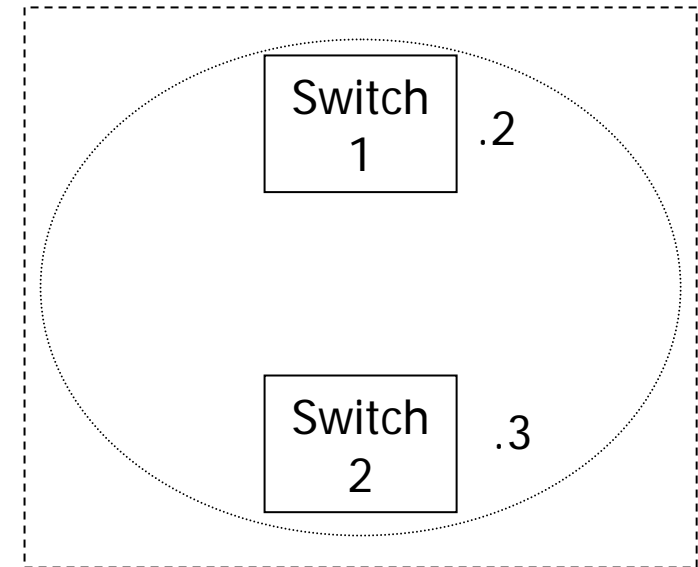
- Thoughts for the Future
  - Auto configuration and self protection of networks is needed today more than ever.
    - Human error (or worse) can have devastating impacts to the mission.

VRRP ADDRESS  
(software)  
XXX.XXX.XXX.1

**Self Protection of network  
devices and applications is  
important!!**



**Printer IP address XXX.XXX.XXX.1**



- Thoughts for the Future (Cont'd)
  - Continue to converge services and federate networks onto a monolithic backbone to save maintenance dollars.
  - Standardize products to increase training effectiveness.
  - Out of band Network Management

- Thoughts for the Future (Cont'd)
  - Aggressively ensure those applications loaded on workstations can be updated without having to touch the workstation.
  - Smart methods to bring content to the Strike Groups.
    - Increase bandwidth without increasing bandwidth.

Questions?

Fragen?

¿Preguntas?